

ABSTRACT

A scanning-based radiation detector apparatus and method are disclosed. A one-dimensional detector (16) is exposed to a fan-shaped beam (24) of ionizing radiation from a radiation source (11) as transmitted through an object, where the detector (16) is of the kind wherein charges or photons generated by interactions between the radiation beam (24) and a detection medium and traveling in a direction essentially perpendicular to the radiation beam (24), are detected. A device (17-19, 21-22) moves the detector (16) and the radiation beam (24) relative to the object while the detector (16) is arranged to repeatedly detect to thereby create an image of the object. According to the invention the detector (16) has a detecting arrangement (27, 28), which comprises a large number of individual detecting elements (27a), and means for grouping the individual detecting elements together to form a plurality of detecting stripes side-by-side, which plurality of detecting stripes are all pointing towards the radiation source (11).